#### OTA Advisor E-Newsletter: Winter 2004

Welcome to the Massachusetts Office of Technical Assistance's (OTA) email newsletter, the OTA Advisor. This will provide information on major OTA initiatives, available tools and publications, upcoming workshops and events, and other news of interest to Toxics Use Reduction Act (TURA) filers and other toxic chemical users. An electronic version of the OTA Advisor, and other information on toxics use reduction in Massachusetts can be found on the OTA website at <a href="http://www.mass.gov/ota">http://www.mass.gov/ota</a>. If you have suggestions on how we can make the OTA Advisor more useful, or to add or remove your name from the mailing list, please email your request to <a href="mailto-mail

#### REMINDERS:

# TURA Planning Year - Due by July 1, 2004!

Just a friendly reminder, this TURA filing year is also a TURA Planning year. Remember, OTA is here to help you! Staff is available to answer your questions about filing Form S and TURA plans - please call OTA's general number 617-626-1060.

#### Have you filed your EPCRA Tier II Chemical Inventory Report?

They were due March 1st... visit the EPA website for more information. http://yosemite.epa.gov/oswer/ceppoweb.nsf/content/tier2.htm

### Risk Management Plans Renewal Deadline Just Around the Corner

Facilities that filed Risk Management Plans (RMP) under the Clean Air Act section 112(r) in 1999 are required to update the plans by June 2004. Section 112(r) lists 139 hazardous substances and establishes specific storage thresholds. Anhydrous ammonia is the most common chemical that requires a facility to submit an RMP. These plans can be filed electronically using an Environmental Protection Agency (EPA) computer program called RMP Submit. http://yosemite.epa.gov/oswer/ceppoweb.nsf/content/RMPS.htm?OpenDocument

# IN THE NEWS:

# OTA Returns to the Saltonstall Building

On March 8, 2004, OTA will be operational in new offices at: 100 Cambridge Street, Suite 900, Boston, MA 02114. Although our physical address will change, OTA's phone numbers and emails will stay the same. If you happen to be in the area... please stop by!

### New Training Center at Bay Path Regional Vocational Technical School

First in State to Offer Environmentally Friendly Spray Technology

Environmental Affairs Acting Undersecretary Gary Moran and Massachusetts Office of Technical Assistance Director Paul Richard presided over a ribbon-cutting ceremony at Bay Path Regional Vocational Technical School in Charlton, MA on October 2, 2003 for the opening of the first Massachusetts Spray Technique and Analysis Research (STARÒ) training center.

The Office of Technical Assistance (OTA) established the STARÒ training center, in cooperation with Bay Path Regional, with a \$52,000 grant from the U.S. Environmental Protection Agency that will work to improve manual spraypainting operations, thereby reducing health risks and environmental impacts. The program, originally developed by the Iowa Waste Reduction Center, is directed towards automotive technicians, industrial painters, and students studying to become spray technicians. Participants experience individual, hands-on training using a laser-guided spray gun that optimizes transfer efficiency and reduces overspray, thus reducing pollution and paint waste.

To further utilize this innovative training center, Bay Path is seeking funding through a Workforce Training Fund Grant from the Massachusetts Division of Career Services to offer the Laser-Touch spray technique training for the unemployed.

#### GKN SINTER METALS RECOGNIZED FOR WATER CONSERVATION SUCCESS

Aggressive water conservation program saves millions of gallons per year

On January 9, 2004, Environmental Affairs Secretary Ellen Roy Herzfelder and Massachusetts Office of Technical Assistance (OTA) Director Paul Richard recognized GKN Sinter Metals Corporation, located in Worcester, MA, for the proactive steps taken to reduce the total amount of fresh water consumption at its facilities. Since implementing an on-site pretreatment and recycling operation, GKN Sinter Metals has reduced total fresh water consumption by eight million gallons per year.

"GKN Sinter Metals Corporation has built a strong working partnership with OTA that has yielded impressive environmental and economic results," said Secretary Herzfelder. "I commend GKN Sinter Metals for their excellent corporate citizenship and urge other firms to find out how helping the environment can also help their bottom lines."

In 1994, GKN Sinter Metals Corporation added a water pre-treatment and recycling system to their manufacturing operations. In addition to significant reductions in fresh water use, the company also reduced their soap consumption by 6,000 gallons per year. Copper, fats, oils, and grease were also reduced to levels below the limits established by the local publicly owned treatment works (POTW). The installation of the pretreatment system resulted in a financial savings of nearly \$80,000 per year.

### Pilot Project For Clarifying Paper & Textile Effluent Underway

The Advanced Technology & Manufacturing Center at UMass-Dartmouth and OTA formed a partnership to build a pilot unit to test the large-scale feasibility of the TAMLÒ catalyst. OTA will support this effort with \$7,000 for equipment and UMass-Dartmouth will contribute \$24,000 to fund a graduate student research assistant to do the work. The TAMLÒ catalyst, developed by investigators at Carnegie Mellon University, is an innovative chemistry that is used to activate hydrogen peroxide to accelerate the oxidation of organic compounds in the clarification of paper and textile mill effluent. This promising new approach for clarifying is a better alternative to chlorine-based oxidants because it does not form dioxin.

#### **EVENTS:**

#### Optimizing Steam System Performance

March 23rd, Keyspan Energy Headquarters, Waltham, MA

The U.S. Department of Energy is sponsoring a workshop featuring presentations by federal, state, and industry representatives, and includes a hands-on demonstration of DOE's software tools for steam systems. You can register on-line at: <a href="http://www.maiof.org/steam.htm">http://www.maiof.org/steam.htm</a>

# Back by Popular Demand: Industrial Water Conservation Seminars

MAY 2004: Intel Massachusetts - Hudson, MA

The Intel Massachusetts semiconductor manufacturing facility in Hudson is currently producing Pentium® 4 microprocessors. The participants will learn how Intel implemented numerous water conservation projects through a team-oriented approach. These projects ranged from simple administrative modifications to Ultra Pure Water Recycle Systems and resulted in an annual savings of over 50 million gallons of water. The seminar will demonstrate the importance of water conservation and reuse strategies for successful business growth and maintaining a competitive edge in the face of limited water and wastewater capacity. A tour of the facility will enable participants to gain a thorough understanding of the Ultra Pure Water Recycle system. While the focus of the seminar will be toward ultra pure water applications in semiconductor manufacturing, Intel's approach and concepts are transferable to other industries, such as printed circuit manufacturing.

# FALL 2004: Cranston Print Works - Webster, MA

The main focus of this seminar will be to show how a union/management team-oriented approach enabled Cranston Print Works, a textile printing facility, to achieve water savings not believed possible in the textile industry. The highlight of the seminar will be a guided tour of the facility, which will help participants gain a thorough understanding of the 25 plus water conservation projects that have been implemented. The collective result of these projects is an annual savings of 110 million gallons of water and close to \$350,000 in wastewater and energy costs.

### Conference for Community Awareness of Clean & Green Manufacturing

September 16, 2004 - Worcester, MA

OTA, in partnership with Environmental Affair's Environmental Justice Program, is holding a conference this September to create community awareness about the latest innovations and opportunities for clean manufacturing methods. Participants will have the opportunity to see hands-on exhibits of environmentally-friendly manufacturing equipment, processes and products, and gain the tools to promote and establish clean manufacturing practices in their communities. To encourage statewide participation, free regional shuttle-bus transportation will be provided through a grant from the National Institutes of Health.

If you are interested in attending one of these events, please email Sue Lanza at  $\underline{Susan.Lanza@state.ma.us}$  and she will send you further information as it becomes available.

# Follow Up to the Innovations in Manufacturing Conference

On October 23, 2003, OTA co-sponsored a workshop with the Associated Industries of Massachusetts and Massachusetts Manufacturing Extension Partnership, which featured four sessions highlighting new technologies and approaches that enable "Green and Clean" processes yielding environmental and economic benefits. Secretary of Environmental Affairs Ellen Roy Herzfelder welcomed the 61 attendees from industry and state government. Dr. John Warner was the keynote speaker during the luncheon program and spoke about green chemistry to an audience that not only included the workshop attendees but over 25 students from local Worcester high schools. Afterward, the participants and students explored displays of Massachusetts industries that successfully reduced or eliminated toxics or water use in their processes.

### New Publications:

Crane & Company, Inc. Toxics Use Reduction Case Study
http://www.state.ma.us/ota/CASES/CRANE PAPER.HTM

Crane & Company, Inc. (Crane), located in Dalton, Massachusetts, is the oldest, continuously run paper manufacturer in North America. Crane is a specialty mill that produces paper requiring highly technical specifications, mostly from cotton and other natural and synthetic fibers. The company reduced the use of sulfuric acid by approximately 697,000 lbs and sodium hypochlorite by 576,000 lbs between 1999 and 2000, a combined reduction of about 46%. Crane achieved these reductions by modifying the process chemistry for the re-pulping of off-specification papers. The sulfuric acid was replaced with an innovative liquid carbon dioxide system and the sodium hypochlorite was reduced by specifying cleaner raw materials, and by controlling the temperature and pH of the process.

Environmentally Preferable Purchasing for Municipal Agencies Fact Sheet http://www.state.ma.us/ota/specprog.htm#dpw

This fact sheet is based on OTA's results of an EPA funded grant program. OTA distributed money to cities and towns that agreed to purchase environmentally preferable products or services. This fact sheet covers the benefits and

costs associated with the products/services that were purchased and recommendations from each municipality.

Best Management Practices for Pollution Prevention at Municipal DPWs http://www.state.ma.us/ota/specprog.htm#dpw

This Best Management Practices Fact Sheet is a compilation of common recommendations for Departments of Public Works (DPWs) that originated from on-site technical assistance evaluations by OTA. The fact sheet highlights some of the simple pollution prevention practices specifically for DPWs to integrate into their daily routine that will improve worker safety and protect the environment.

These publications are available on OTA's website at  $\frac{\text{http://www.mass.gov/ota}}{\text{or contact Chris MacIsaac, at}}$ 

(617) 626-1074 or Christopher.Macisaac@state.ma.us

A publication of the Massachusetts Office of Technical Assistance for Toxics Use Reduction (OTA).

Mitt Romney, Governor Ellen Roy Herzfelder, Secretary Kerry Healey, Lieutenant Governor Paul Richard, Director

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